11





ENTERED

DATE: 03/29/2002

TIME: 13:28:15

OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/960,631A

Input Set : A:\266_171.ST25.txt

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3 <110> APPLICANT: MIROCHNITCHENKO, Oleg
         WEI, Jiang
 4
 5
         INOUYE, Masayori
 7 <120> TITLE OF INVENTION: SOLUBLE ISCHEMIA ACTIVATED PROTEIN
 9 <130> FILE REFERENCE: 266/171
                                                             RECEIVED
11 <140> CURRENT APPLICATION NUMBER: US 09/960,631A
12 <141> CURRENT FILING DATE: 2001-09-20
                                                              APR 1 1 2002
14 <150> PRIOR APPLICATION NUMBER: US 60/233,819
15 <151> PRIOR FILING DATE: 2000-09-20
17 <160> NUMBER OF SEQ ID NOS: 8
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19 <170> SOFTWARE: PatentIn version 3.1
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22 <211> LENGTH: 840
23 <212> TYPE: DNA
24 <213> ORGANISM: Homo sapiens
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29 agcgagggc ctgctggctc ccggagcggt cgcctcttcc gcccgccgag tcccgctccg
                                                                         120
                                                                         180
31 geggeeeeg gegeeegget gttgeggete eeggggageg gggeegtgea ggeegegage
33 coggagogog coggotggac cgaggogotg cgggoogoog tggcogagot gogogooggo
                                                                         240
35 geogtggtgg cegteeceae egataegetg taeggeetgg cetgegegge gagetgeteg
                                                                         300
37 geggetetge gegetgtgta cegeeteaag ggtegeageg aggeeaagee tetggeegta
                                                                         360
39 tgcctcggcc gcgtggccga cgtctacaga tactgccgtg tgagagtacc tgaggggctc
                                                                         420
41 ctgaaagacc tactgccagg accagtgacc ctggtgatgg aacgctcgga ggagctcaac
                                                                         480
43 aaggacctaa accettttac geetettgta ggeattegga tteetgatea tgettttatg
                                                                         540
45 caagacttgg ctcagatgtt tgagggtccg cttgctctca ctagtgccaa cctcagctcc
                                                                         600
                                                                         660
47 caggccagtt ctctgaatgt cgaggagttc caggatctct ggcctcagtt gtccttggtt
49 attgatgggg gacaaattgg ggatggccag agccccgagt gtcgccttgg ctcaactgtg
                                                                        720
51 gttgatttgt ctgtgcccgg aaagtttggc atcattcgtc caggctgtgc cctggaaagt
                                                                        780
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58 <212> TYPE: PRT
59 <213> ORGANISM: Homo sapiens
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67 Ser Val Gly Leu Ser Glu Gly Pro Ala Gly Ser Arg Ser Gly Arg Leu
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71 Phe Arg Pro Pro Ser Pro Ala Pro Ala Pro Gly Ala Arg Leu Leu
                               40
75 Arg Leu Pro Gly Ser Gly Ala Val Gln Ala Ala Ser Pro Glu Arg Ala
76
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Input Set : A:\266_171.ST25.txt

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79 Gly Tyr Thr Glu Ala Leu Arg Ala Ala Val Ala Glu Leu Arg Ala Gly
     80 65
                            70
     83 Ala Val Val Ala Val Pro Thr Asp Thr Leu Tyr Gly Leu Ala Cys Ala
     87 Ala Ser Cys Ser Ala Ala Leu Arg Ala Val Tyr Arg Leu Lys Gly Arg
                    100
                                        105
     91 Ser Glu Ala Lys Pro Leu Ala Val Cys Leu Gly Arg Val Ala Asp Val
                115
                                    120
     95 Tyr Arg Tyr Cys Arg Val Arg Val Pro Glu Gly Leu Leu Lys Asp Leu
                                135
                                                     140
     99 Leu Pro Gly Pro Val Thr Leu Val Met Glu Arg Ser Glu Glu Leu Asn
     100 145
                             150
                                                  155
     103 Lys Asp Leu Asn Pro Phe Thr Pro Leu Val Gly Ile Arg Ile Pro Asp
                         165
     107 His Ala Phe Met Gln Asp Leu Ala Gln Met Phe Glu Gly Pro Leu Ala
                                                              190
     108
                                          185
                     180
     111 Leu Thr Ser Ala Asn Leu Ser Ser Gln Ala Ser Ser Leu Asn Val Glu
                                      200
    115 Glu Phe Gln Asp Leu Tyr Pro Gln Leu Ser Leu Val Ile Asp Gly Gly
                                 215
                                                      220
     119 Gln Ile Gly Asp Gly Gln Ser Pro Glu Cys Arg Leu Gly Ser Thr Val
                                                  235
    120 225
                             230
    123 Val Asp Leu Ser Val Pro Gly Lys Phe Gly Ile Ile Arg Pro Gly Cys
                         245
                                              250
    127 Ala Leu Glu Ser Thr Thr Ala Ile Leu Gln Gln Lys Tyr Gly Leu Leu
                                          265
                                                              270
    128
                     260 -
    131 Pro Ser His Ala Ser Tyr Leu
    132
                 275
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    136 <211> LENGTH: 1387
     137 <212> TYPE: DNA
     138 <213> ORGANISM: Homo sapiens
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     142 <222> LOCATION: (1)..(1387)
     143 <223> OTHER INFORMATION: The letter "n" stands for a substitution base.
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     149 cttgtaggca ttcggattcc tgatcatgct tttatgcaag acttggctca gatgtttgag
                                                                               120
    151 ggtccgcttg ctctcactag tgccaacctc agctcccagg ccagttctct gaatgtcgag
                                                                               180
    153 gaqttccaqq atctctqqcc tcaqttqtcc ttqqttattq atgqgggaca aattggggat
                                                                               240
    155 gqccagagcc ccqagtqtcg ccttggctca actgtggttg atttgtctgt gcccggaaag
                                                                               300
    157 tttggcatca ttcgtccagg gtgtgcctgg gaaagtacta cagccatcct ccaacagaag
                                                                               360
    159 tacggactgc tececteaca tgcgtectae etgtgaaact etgggaagea ggaaggeeea
                                                                               420
    161 agacctggtg ctggatacta tgtgtctgtc cactgacgac tgtcaaggcc tcatttgcag
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    163 aggccaccgg agctagggca ctagcctgac ttttaaggca gtgtgtcttt ctgagcactg
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    165 tagaccaage cettggaget getggtttag cettgeacet ggggaaagga tgtatttatt
                                                                               600
    167 tgtattttca tatatcagcc aaaagctgaa tggaaaagtt aagaacattc ctaggtggcc
                                                                               660
    169 ttattctaat aagtttcttc tgtctgtttt gtttttcaat tgaaaagtaa ttaaataaca
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Input Set : A:\266_171.ST25.txt

			700									
		gatttagaat ctagtgagag cntcctctct gggggtggtg gcatttaagg ttcaacccan	780									
W>		conagaagtg ctgcgctgtt taaaaagtct caggtggctg cgtgtggtgg ctcatgcctg	840 900									
		taatcccaac attctgggag gcccaggcgg gagaactgct tgagcccagg agttcagaat	960									
		cagcotgggc aacatagcaa tactoogtot cataaaaaatt aataaataaa aagtotcagg	1020									
		tgaccaaagg ctcctgaagc tagaaccagg tttggataaa gattgaagag ccacaggcca	1020									
		ctcttccctc tgagccattg ggcctagtgg tgtcatgtat tgtaattgct cgcagggaga	1140									
		gcagtctttt tggtgtaata gtgggatgtc tgcttagttg gcaggggttc agtccaaatg	1200									
W>		gaagaatatt gggaaataaa cctccnctat cctttatagc cagggacttt tttcttattt	1260									
		attcataaaa taaattatag ttaattatac ccataacacc tttatttaaa tccagtgttc	1320									
		tccgcagcct tttgtctatt tatatgtgta ccaagtgtta aacataatta ttattgggca	1380									
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	193 aaaaaaa 196 210 SEO ID NO. 4											
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		agegaeggge eggetagtte tggeegegge tgeegeetee tactecetee tgageeeget	120									
		congretere engagement to the engagement of the e	180									
		ageocogage gegeoggetg gaccgaggeg etgegggeeg cegtggeega getgegegee	240									
		ggcgccgtgg tggcggtccc gaccgacacg ctctacggcc tggcctgctc ggcgagcagc	300									
		toggoggood tgagttgogt gtacogooto aaaggoogoa gogaggooaa googotggoo	360									
		qtqtqcctgg gccgcgtggc cgacgtctac aggtactgtc aggtgagagt acctagggag	420									
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		aacaaagacc tgaacccctt tactcgtctt gttggcatcc ggattcctga ccatgccttc	540									
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	243	1 5 10 15										
	246	Gly Met Gly Leu Ser Asp Gly Pro Ala Ser Ser Gly Arg Gly Cys Arg										
	247	20 25 30										
		Leu Leu Pro Pro Glu Pro Ala Pro Ala Leu Pro Gly Ala Arg Leu										
	251	35 40 45										
		Leu Arg Leu Pro Glu Ser Glu Pro Val Glu Ala Ala Ser Pro Glu Arg										
	255	50 55 60										
		Ala Gly Tyr Thr Glu Ala Leu Arg Ala Ala Val Ala Glu Leu Arg Ala										
	259											
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Input Set : A:\266_171.ST25.txt

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263
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266 Ser Ala Ser Ser Ser Ala Ala Leu Ser Cys Val Tyr Arg Leu Lys Gly
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270 Arg Ser Glu Ala Lys Pro Leu Ala Val Cys Leu Gly Arg Val Ala Asp
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                                                     125
            115
274 Val Tyr Arg Tyr Cys Gln Val Arg Val Pro Arg Glu Leu Leu Glu Asp
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                            135
                                                 140
275
278 Leu Phe Pro Gly Pro Val Thr Leu Val Met Glu Arg Ser Glu Glu Leu
                        150
                                             155
282 Asn Lys Asp Leu Asn Pro Phe Thr Arg Leu Val Gly Ile Arg Ile Pro
                    165
                                         170
286 Asp His Ala Phe Met Leu Asp Leu Ala Gln Met Phe Gly Gly Pro Leu
                                     185
                                                         190
290 Ala Leu Thr Ser Ala Asn Leu Ser Ser Gln Ala Ser Ser Leu Ser Val
                                                     205
            195
                                 200
294 Glu Glu Phe Gln Asp Leu Tyr Pro His Leu Ser Leu Val Ile Asp Gly
                            215
298 Gly Pro Ile Gly Asp Ser Gln Ser Pro Glu Cys Arg Leu Gly Ser Thr
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                                             235
302 Val Val Asp Leu Ser Val Pro Gly Lys Phe Gly Ile Ile Arg Pro Gly
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306 Cys Ala Leu Glu Asn Thr Thr Ser Ile Leu Gln Gln Lys Tyr Gly Leu
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317 <213> ORGANISM: Bos taurus
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324 ccgcgtggcc gacgtctaca ggtactgcca cgtgagagta cctgaggggc tcctgaagga
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326 cctgttgcca ggaccagtga ccctggtgat ggaacgctca gaggagctca acaaggacct
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328 gaateettte acteetettg taggeateeg gatteetgae caegeettea tgeaggaett
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330 ggtccagatg tttggggggc cactcgctct caccagtgcc aacctcagct cccagtccag
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332 ctctctgaat gttgaggaat tccaggacct gtggcctcac ttgtccctga tcattggtgg
                                                                           420
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334 gggaccaatt ggggacggcc agagcccaga gtgtcgacta ggctcaactg tggttgactt
336 gtctgtgcct ggaaagtttg gcatcattcg tcctggttgt gcccttgaaa gtacttcagc
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338 catectecag gagtatggge tgeteceete acatggatee tgetggtgae actetggagg
                                                                           600
340 agggaaggcc caagggctgg tgctggacac tatgtgtccg actgctggtg gttggcaagg
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347 <212> TYPE: PRT
348 <213> ORGANISM: Bos taurus
350 <400> SEQUENCE: 7
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Input Set : A:\266_171.ST25.txt

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	Gln S			Ser	Leu	Asn	Val 55		Glu	Phe	Gln	Asp 60	Leu	Trp	Pro	His	
368 369	Leu S 65	er	Leu	Ile	Ile	Gly 70	Gly	Gly	Pro	Ile	Gly 75	Asp	Gly	Gln	Ser	Pro 80	
372 373	Glu Ç	ys .	Arg	Leu	Gly 85	Ser	Thr	Val	Val	Asp 90	Leu	Ser	Val	Pro	Gly 95	Lys	
377	Phe G	-		100	_		_	_	105					110	Ala	Ile	
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	aaata		-	-				_	_		_						180
	catgo										_						240
	agcta		-	_	-								-				300
					+ 420	TC C1	taca	CCC	ασα	ισαασ	ratt	atat	ttac	ነተር 1	tatac	rattoa	360
	ccaga																
	tgtgt	caa	cc c	agaa	tgga	ig go	gaaga	acat	tct	taga	igtg	acct	tatt	at 1	tttaa	agtgcc	420
410	tgtgt cctct	.caa .cac	cc c	cagaa	tgga	ig go	gaaga ataag	acat yttaa	tct gta	taga	igtg :gac	acct tgca	tatt Igaat	tat 1	tttaa gaate	agtgcc gcatta	480
410 412	tgtgt cctct agagc	caa cac tgc	cc c cc c tt a	cagaa caaco	tgga ctga	ig go ec ta ic ag	gaaga ataag gtgaa	acat yttaa attt	tct gta ggt	taga actt ttaa	igtg igac iaac	acct tgca cago	tatt igaat ccaga	tat 1 ta 9 nag 0	tttaa gaatq cacta	gtgcc gcatta aatgca	480 540
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410 412 414 416	tgtgt cctct agagc gtcta tacag	caa cac tgc gaa	cc c cc c tt a gt c ag t	cagaa caaco actgo ctcag	tgga ctga ggaco gatti	ig go ec ta ic ao ea ai	gaaga ataag gtgaa ggaaa	acat yttaa nattt ycaaa natta	tota gta ggta ggta gta	taga lactt ttaa ctaga	igtg igac iaac jagc	acct tgca cago ccto tcca	tatt igaat ccaga igcca iaatq	tat i ta g lag d lga g	tttaa gaatg cacta gctti ataai	agtgcc gcatta aatgca tctggg tattga	480 540 600 660
410 412 414 416 418	tgtgt cctct agagc gtcta tacag aaaat	caa cac tgc gaa gag	cc c cc c tt a gt c ag t at c	cagaa caaco actgo ctcag cggto	tgga ctga ggaco cattt	ng go ec ta nc ao ea ai eg ga et ti	gaaga ataag gtgaa gcag agaaa ccag	acat yttaa iatti ycaaa iatta ccagt	tci gta ggta gta gta tta	taga actt ttaa ctago ctago	igtg igac iaac jagc jagt	acct tgca cago ccto tcca ttta	tatt agaat ccaga gcca aatq attgg	tat in the state of the state o	tttaa gaato cacta gctti ataat	agtgcc gcatta aatgca tctggg tattga tctctg	480 540 600 660 720
410 412 414 416 418 420	tgtgt cctct agagc gtcta tacag aaaat tttaa	caa cac tgc gaa gag aaa	cc	cagaa caaco actgo ctcag cggto cttga	tggac gtgac gacttt ctgt	ec ta ac aq ca at cg ga at ti ga aq	gaaga ataag gtgaa ggaaa caga gtcat	acat gttaa attt gcaaa atta ccagt	teta gta ggta gta tta	taga actt ttag ctago ctago cttto	igtg igac iaac jagc jagt etta itgt	acct tgca cago ccto tcca ttta ctao	tattagaat cagaat ggcca aatg attgg	tat in the state of the state o	tttaa gaatg cacta gcttt ataat tagtt	agtgcc gcatta aatgca tctggg tattga tctctg	480 540 600 660 720 780
410 412 414 416 418 420	tgtgt cctct agagc gtcta tacag aaaat tttaa tattt	caa cac tgc gaa gag aaa	cc	cagaa caaco actgo ctcag cggto cttga	tggac gtgac gacttt ctgt	ec ta ac aq ca at cg ga at ti ga aq	gaaga ataag gtgaa ggaaa caga gtcat	acat gttaa attt gcaaa atta ccagt	teta gta ggta gta tta	taga actt ttag ctago ctago cttto	igtg igac iaac jagc jagt etta itgt	acct tgca cago ccto tcca ttta ctao	tattagaat cagaat ggcca aatg attgg	tat in the state of the state o	tttaa gaatg cacta gcttt ataat tagtt	agtgcc gcatta aatgca tctggg tattga tctctg	480 540 600 660 720

VERIFICATION SUMMARY

DATE: 03/29/2002

PATENT APPLICATION: US/09/960,631A

TIME: 13:28:16

Input Set : A:\266_171.ST25.txt

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L:173	M:341	\mathtt{W} :	(46)	"n"	or	"Xaa"	used,	for	SEQ	ID#:3
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L:191	M:341	W:	(46)	"n"	or	"Xaa"	used,	for	SEQ	ID#:3